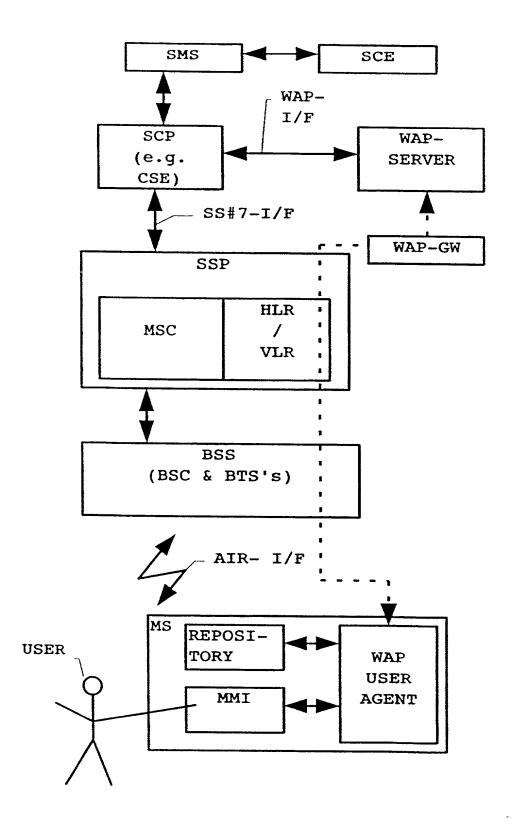
1/17

FIG. 1



<u> 10010984 120761</u>

FIG. 2

(HLR) SSP SERVER WAP-WAP-GW MS/ USER AGENT

(HLR)

S51: INDICATION OF IMSI
ATTACH (CAMEL PHASE) WAP
CAPABILITY (OPTION A)

SCP

S52: CHECK IF MSP IS PROVISIONED

SIM OR MS CONTAINS APPLICATION RESPOSNIVE TO IMSI ATTACH, WHICH CHECKS MS CAPABILITIES AND REPORTS THEM TO CSE (OPTION B)

S53: MS WAP CAPABILITY

S54: IF MSP NOT DOWNLOADED, START DOWNLOADING

S55: CHECK

SERVING NETWORK

FOR CAMEL PHASE

MODIFY MSP MENU DEPENDING ON THE DEGREE OF SERVICES AVAILABLE. SERVICES CURRENTLY NOT AVAILABLE ARE OMITTED FROM MSP MENUS

S56: MSP VERSION

11,

FIG. 3

FIG.

WAP-GW

MS/ USER

USER

AGENT

SERVER WAP-

(MSC) SSP

(CSE) SCP

S71: SELECT OUTGOING

CALL MENUS

S72: MSP CONTENT RETRIEVED FROM

MS REPOSITORY

S73: "SELECT TYPE OF OUTGOING CALL"

(e.g.: 1=BUSINESS, 2= PRIVATE)

S74: TYPE SELECTED

S75: INITIATE CALL SETUP BY MSP CONTENT e.g. USING

ID PREFIX) WITH PROFILE WTAI SETUP (ISDN-B

S76: InitialDp (ISDN-B WITH PROFILE ID PREFIX)

S77: FurnishChargingInformation (PROFILE ID)

S78: CONNECT (CHANGED MSISDN-A)

S88: CONNECT (UNCHANGED MSISDN-B)



			$\widehat{}$		5/17	
SCP (CSE)			S83: InitialDp (ISDN-B WITHOUT PROFILE ID PREFIX)	S84: CTR & PACUI		(PROFILE ID)
SSP (MSC)		x x	WITHOUT PR	S84: C	1	nformation
WAP SERVER		(ISDN-B WITHOUT PROFILE ID PREFIX)	tialDp (ISDN-E			S87: FurnishChargingInformation (PROFILE ID)
WAP-GW		MITHOUT PRO	S83: Ini	63	IRMATION	S87: Fur
MS/ USER AGENT		P (ISDN-E		M PROFILE	E CONFIRM	
MS/ U	TGOING	S82: SETUP		S85: CONFIRM PROF	S86: PROFILE CONF	
USER	S81: START OUTGOING	SS.		\$85	3888	

9 FIG.

MS/ USER

USER

AGENT

WAP-GW

SERVER WAP-

(MSC) SSP

(CSE) SCP

S90:0NGOING

CALL

S91: (e.g.) ACTIVATE CALL HOLD

S91a:WML CONTENT

INTERCEPTS STANDARD

USER INTERFACE SIGNAL

S91b: INTERCEPT CALL

HOLD FUNCTIONAL COMMAND

S92:USSD OR DIMF SIGNAL

S93: CALL PARTY HANDLING COMMANDS

FIG. 7

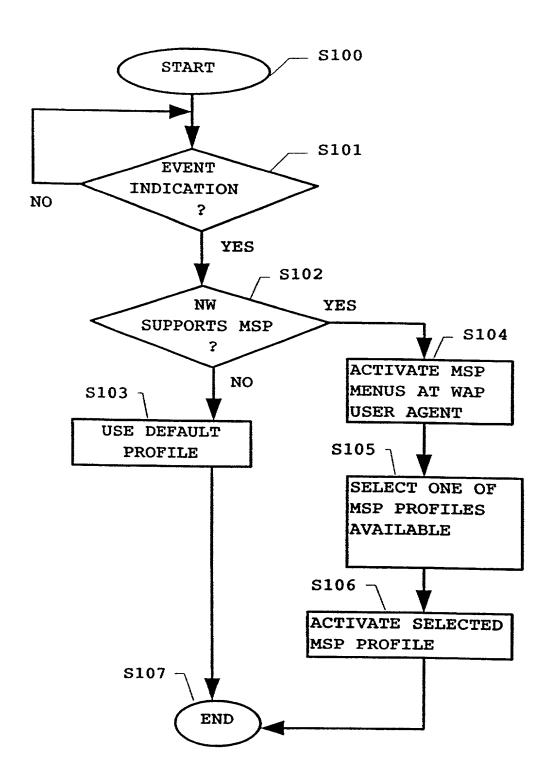


FIG. 8A

WAP-GW MS/ USER AGENT

SERVER WAP-

(HLR) SSP

(CSE) SCP

S81: INDICATION OF IMSI

ATTACH (CAMEL VERSION)

S83: USER AGENT CAPABILITIES,

SUCCESSFUL IMSI ATTACH

FROM MS TO USER AGENT: S82: EVENT REPORT ON DOWNLOADED SOFTWARE COMPONENTS

S84: USER AGENT CAPABILITIES,

DOWNLOADED SOFTWARE COMPONENTS

MSP PROVISIONED S85: CHECK IF

NETWORK & CHECK USER AGENT CAPABILITIES PHASE FOR SERVING -> DETERMINE MSP S86: CHECK CAMEL

VERSION

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FIG. 8B

(HLR) SSP SERVER WAP-WAP-GW MS/ USER AGENT

CASE A): MSP SERVICE NOT DOWNLOADED

SCP (CSE) S87a: IF MSP SERVICE NOT DOWNLOADED OR TERMINAL TYPE MODIFIED SINCE LATEST IMSI ATTACH, START MSP MENUS DOWNLOADING

S88a: WTA CATALOGUE & MSP MENU CONTENT

CASE B): MSP SERVICE DOWNLOADED

S87b: IF MSP SERVICE DOWNLOADED, INDICATE MSP VERSION

S88b: MSP VERSION

FIG. 9A

SUPPLEMENTARY SERVICE DATA S92: USER ENTERS

PRIMARY (e.g. GSM SS BASED) OR SECONDARY (e.g. CAMEL BASED) S93: DETRMINE PROFILE TYPE:

CASE A): IF PRIMARY

S94a: REQUEST SS REGISTRATION VIA API

SS S96a: REGISTER S97a: RESPONSE S95a: REGISTER SS

S98a: RESPONSE

S99a: RESPONSE

FIG. 9B

SCP (CSE)				A		
SSP (HLR)			NO	S96b: SS INFORMATION	S97b: RESPONSE	
WAP-			S95b: POST SS INFORMATION	:496S	S97b	S98b: RESPONSE
WAP-GW		4	895b: POS			S98b:
MSC/VLR	DARY	ORMATION				
MS	CASE B): IF SECONDARY	S94b. POST SS INFORMATION				S99b: RESPONSE
USER AGENT	CASE B)	S94b. P				\$99b:

FIG. 10A

SCP (CSE)				12/17		S1006a: DP ON SS REGISTRATION	S1007a: CONTINUE SS REGISTRATION	
SSP (HLR)			-		<u>,</u>	S1006 REGIS	S1007	
WAP- SERVER					S1005a: REGISTER SS		S1008a: RESPONSE	
WAP-GW				REGISTER SS	S1			₩ ₩
MSC/VLR	S1001: USER SELECTS TO MODIFY SUPPLEMENTARY SERVICE (SS) DATA	S1002: USER ENTERS SUPPLEMENTARY SERVICE DATA	CASE A): IF PRIMARY	S1003a: REGISTER SS S1004a: REGI				S10010a: RESPONSE
MS S	S1001: 1 SUPPLEM	S1002: U	CASE A)	S1003a:				\$10010a

FIG. 10B

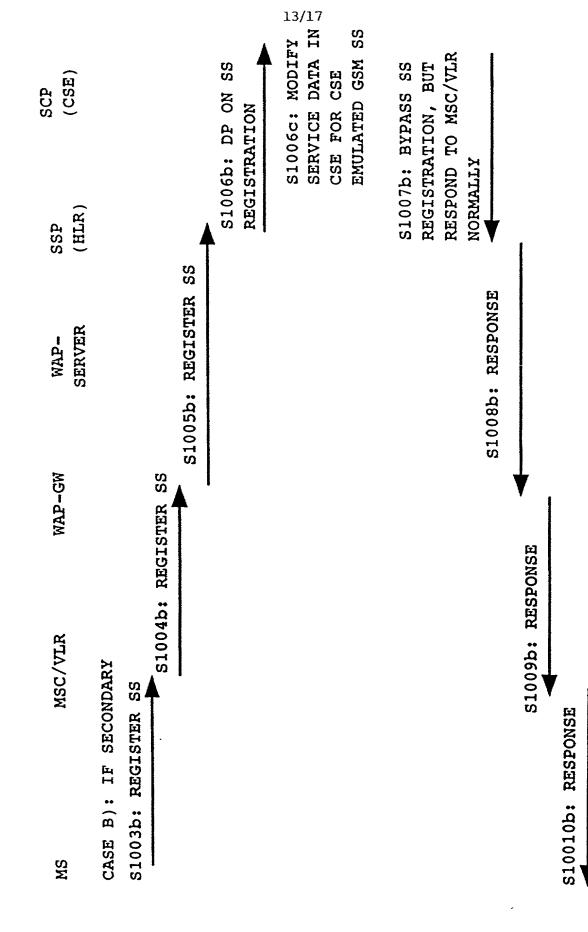


FIG. 11A

S111: INDICATION OF IMSI ATTACH (CAMEL VERSION) SCP (CSE) (HLR) SSP IDENTITY OF LATEST MS, AND IF MS CHANGED: SERVER WAP-S112a: CHECK FROM SIM: SERIAL NO. SUCCESSFUL IMSI ATTACH WAP-GW FROM MS IO USER AGENT: S112: EVENT REPORT ON MS/ USER AGENT

SOFTWARE COMPONENTS S114: USER AGENT CAPABILITIES DOWNLOADED SOFTWARE COMPONENTS S113: USER AGENT CAPABILITIES, DOWNLOADED

S115: INDICATE DOWNLOADED SERVICES

S116: INDICATE DOWNLOADED SERVICES

S117: DOWNLOADED SERVICES (MSP, ...

S118: DOWNLOADED SERVICES (MSP, ...)

FIG. 11B

SSP	(HLR)
WAP-	SERVER
WAP-GW	
ABUL / UM	AGENT

S119: CHECK IF MSP PROVISIONED

SCP (CSE) S1110: CHECK IF MSP DOWNLOADED; OPTIONALLY, WHICH PHASE S1111: CHECK USER AGENT CAPABILITIES & SELECT CONTENT VERSION TO BE DOWNLOADED

CASE A): STEPS S1112a, S1113a, AND CASE B): STEPS S1112b, S1113b: AS IN FIG. 8B

FIG. 12A

(CSE) SCP (MSC) SSP SERVER WAP-WAP-GW MS/ USER AGENT S21: IAM (FROM PSTN)

TRIGGERING FROM VMSC OR GMSC
S22: InitialDP

S22A: CHECK FOR MSP SUPPORT S23: CTR + PA

USER INTERACTION STARTS S24:INFORMATION TO BE DISPLAYED, (PROFILES AVAILABLE), SERVICE IDENTITY

S24a: FETCH WML CONTENT SKELETON BASED ON SERVICE IDENTITY

S24b: FILL WML CONTENT SKELETON WITH INFORMATION TO BE DISPLAYEDY

1st CASE: WIA SERVICE INDICATION USED

CONTENT CREATED URL IS WAP-SERVER URL INCL. MSISDN

FIG. 12B

SCP (CSE)				TS ONE	0	TS ONE		
SSP (MSC)				S27a: USER PROMPTED WITH POSSIBLE PROFILES & SELECTS	1 st CASE END 2 nd CASE: WAP PUSH USED WML CONTENT CREATED	WITH POSSIBLE PROFILES & SELECTS	SE END	CHAPTER RITTED AD / WINDER GENT 11.100
WAP- SERVER	ISDN)	REQUEST	TENT	WITH POSSIBLE	1st CA. 2nd CA. WML CC	WITH POSSIBLE	2 nd CASE END	. 1.100
wap-gw	S25: WTA SERVICE INDICATION (URL- MSISDN)	826: GET URL- MSISDN REQUEST	URL- MSISDN CONTENT	S27a: USER PROMPTED S28: POST USER INPUT	S29:WML CONTENT	S29a: USER PROMPTED	POST USER INPUT	
MS/ USER AGENT	\$25: INDI	\$26: G	S27: URL-	S27a: S28: P	S29:	S29a:	S210: POST	

S212: START PROFILE DEPENDENT TERMINATING CALL PROCESSING PROCEDURES